Topical Preparation



Agenda

1-Topical Preparation For Skin Conditions

2-Topical Preparation For Vagina Conditions

3-Topical Preparation For Eye Conditions

4-Topical Preparation For Nasal Conditions

5-Miscellaneous Topical Preparation





Topical Preparation For Skin Conditions

- Corticosteroids
- Anti Fungal
- Antibiotic
- Anti-Viral
- Multi-Component
- Anesthetics
- Bleaching & Hair Fall





Topical Corticosteroid Preparations

Main Application :

1-Anti-Inflammatory
2-Anti-Pruritic
3-Sever Napkin Dermatitis
4-Infantil Eczema
5-Seborrheic Dermatitis
6-Alopecia Areata , Psoriasis , Vitiligo
7-Combined with Bleaching Preparation
8-skin transplantation





Topical Corticosteroid Preparations

Contra-Indicated :

1-Viral Infection of Skin as Chicken Pox
2-Bacterial , Tuberculosis or Syphilitic Skin Lesion
3-Cutaneous Reaction to Vaccination

Dosage Forms:

1-Cream Suitable For Acute & Wet Lesion &Napkin Dermatitis
Suitable Dosage Form For Face, used For Suitable Duration
Rapid Absorbed ,Mild to Moderate Effect
2-Ointment Suitable For Chronic Dry Lesions
3-Gel & Solution Good in Hairy Area
4-Lotion Suitable For Large Area



nahdi land

Topical Corticosteroid Preparations

The Main Side Effects:

1-Bleaching Effect
N.B used in whitening as Pigmanorm,Dermovate

2-Hirsutism
N.B used in Alopecia Areata as Betnovate Scalp

3-ImmunoSuppressive Effect
N.B used in Skin Transplantation

4-Thinning of The Skin

5-H.P.A Axis Suppression (Hypothalamus Pituitary Adrenal Cortex)







Topical Corticosteroid Preparations

Precautions & Counseling With Dispensing :

1-Avoid Long Term Use
2-Avoid Contact With Eye
3-Avoid Direct Contact With Infected Skin
4-Combination with Anti-Biotic or Anti-Fungal stop after 5 days

Special Precautions & Counseling For Children

1-Short Duration as possible (3 – 5 days) in Acute Case
2-Chronic must choice mild
3-Thin Layer of Mild to Moderate Type
4-If Potent Type With Low Systemic Effect Give Once Daily
EX.Mometasone (Elecom)



Topical Corticosteroid Preparations

Potency Of Topical Corticosteroid Preparations

- Mild
- Moderate
- Potent
- Very Potent





Topical Corticosteroid Preparations

Mild Potency Corticosteroids :

1-Hydrocortisone Acetate.(Alfacort , Cortiderm)

2-Alcometasone (perderm)

3-Flumetasone.(Locacortene & Locacortene Vioform)

4-Triamcenolone (low Conc.)







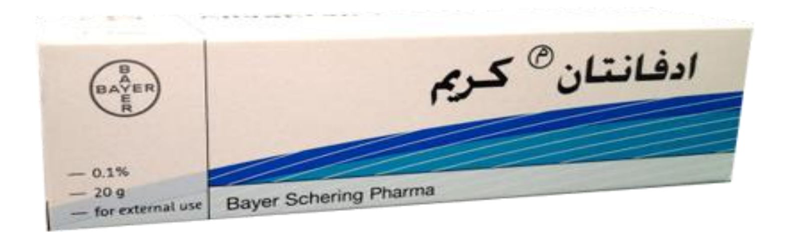


Topical Corticosteroid Preparations

Moderate Potency Corticosteroids :

1-Hydrocortisone Butyrate (Locoid)
2-Betamethasone Valerate.(Betnovate)
3-Methyl Prednisolone (Advantan)
4-Triamcenolone (Med. Conc.)









Topical Corticosteroid Preparations

Potent Corticosteroids :

1-Betamethasone Diprobionate (Diprosone)
2-Mometasone.(Elocom,Elica,Metaz)
3-Fluticasone.(Cutivate)
4-Triamcenolone (High Conc.)



Very Potent Corticosteroids :

Clobetasol.(Dermovate)





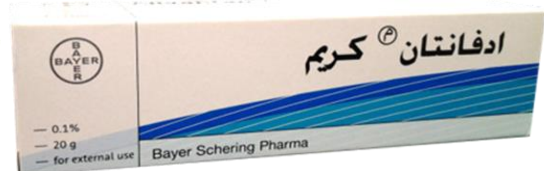


Topical Corticosteroid Preparations

















Topical Corticosteroid Preparations



Potency affected by :

1-Salt (Hydrocortisone Acetate , Hydrocortisone Butyrate)

2-Conc. (Triamcenolone (low Conc.) , Triamcenolone (Med. Conc.)

3-Dosage Form.(Solution , Lotion , Gel , Cream , Ointment)

Cream : used for face , with mild to moderate effect

Ointment : used for dry skin area , delayed in absorption potent effect





Topical Multi-Component Preparations

Corticosteroid
&
Antifungal

Corticosteroid
&
Anti biotic
&
Antifungal

Multi-component

Corticosteroid
&
Anti biotic





Eczema





Eczema



Eczema

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Eczema

Definition:

Skin condition caused by inflammation of the skin
Eczema causes skin to become itchy, red &dry even cracked
Eczema appear at any part of the body
People often also call it Dermatitis

Factors Trigger Eczema :

Stress
Heat & Sweat
Cold & Dry Climate
Contact With Irritating Substance
Dry Skin





Eczema

Eczema is not contagious (غير معدي)

Eczema run in families due to genetic role

<u>Major Risk Factors Patient Who Has:</u>

1-Asthma
2-Seasonal Allergies





Eczema

- Types of Eczema
  - Asteatotic
  - Atopic
  - Stasis
  - Contact
  - Seborrheic
  - Nummular
  - Infection





Eczema

Types of Eczema:

1-Atopic Eczema

Atopic Eczema is worsen by soap , rough clothing , ……

2-Contact Eczema

There are two type :

a-Irritant Eczema (Wife Hand Dermatitis)

b-Allergic Eczema



These types of eczema can develop after a substance damages the skin include chemical & frequent hand washing Contact Dermatitis can develop after person touch allergy trigger as cosmetics





Eczema

Types of Eczema:

3-Infection Eczema

4-Seborrheic Dermatitis
This type of eczema is better known as dandruff
Infant patient affect the scalp (Cradle Cap , Milk Crust)
Adult patient affect eye brow , side of nose
area behind the ear , center of chest

5-Nummular Dermatitis
Factor trigger is climate (cold & dry air)





Eczema

Types of Eczema:



6-Stasis Eczema

This type of eczema can develop in people when the veins in their lower legs don't properly return blood to their heart

7-Asteatotic Eczema
The lower extremities in elderly persons secondary to aging, dehydrated skin, and malnutrition
Asteatotic eczema in neurologic disorders





Eczema

Stages of Eczema:

1-Acute Stage …Itching , Redness , Swelling

2-Sub Acute Stage ..Semi Scale

3-Chronic Stage …Thickening & Pigmented





Eczema

Line of Treatment for Stasis & Asteatotic & Nummular Eczema:

1-Remove The Cause
2-Emollient …Lipobase , Lipotic
3-Systemic Anti-Histamine



Supportive Treatment :

1-Ginko-Biloba to improve blood circulation
2-Foot-Bath





Eczema

Lines of Treatment for Acute Stage of Dry Eczema:

1- Remove The Cause

2-Topical Corticosteroid

3-Emollient

4-Systemic Anti-Histamine
In sub acute and presence of thin scales used Keratolyitc





Eczema

Lines of Treatment for Acute Stage of Wet Eczema:

1- Remove The Cause

2-Anti-Septic Cleansing

3-Topical Corticosteroid as Combination mainly with Anti-Biotic

4-Systemic Anti-Histamine

5-Systemic Anti-Infection





Lines of Treatment for Atopic Eczema:

1- According to dry or wet choice the suitable lines of treatment

2- **Calcineurin Inhibitor Drugs**

Pimecrolimus (1.0%)(Elidel)



Tacrolimus (0.03 and 0.1%)(Protopic)

N.B If has scale used emollient in **thick layer** as **Cetaphil ,Atoderm pp**





Eczema

Lines of Treatment for Seborrheic Dermatitis:

N.B Consider Cradle Cap after 6 months from birth

1-Shampo…ABC Derm

2-Emollient…Baby Oil , Olive Oil used at Night

3-Topical Corticosteroid by physician if needed



But in Adult
Used SeboRegulator Shampoo





Antifungal

Antifungal

Azole

Allylamine

Polyene





Antifungal

Imidazole

Azole

Triazole





Antifungal

Imidazole

Ketoconazole
Topical &Systemic

Miconazole
Topical
Daktarin

Sertaconazole
Topical
Dermofix

Econazole
Topical
Pevaryl

Clioquinol
Topical
Betnovate -C

Clotrimazole
Topical
Canesten

Isoconazole
Topical
Travacort





Antifungal

Ketoconazole available in systemic and topical dosage form
Used for hair as shampoo, frequency of dose twice per week
Used for skin , frequency of dose daily

Econazole available in topical dosage form as Pevaryl
Econazole has some antibacterial effect

Clotrimazole available in topical dosage form as Canesten
Clotrimazole is category B





Antifungal

Miconazole

Available in topical dosage form

Example Daktarin Oral Gel

Dose Of Daktarin Oral Gel :







Antifungal

Triazole
Systemic

Fluconazole
Diflucan

Itraconazole
Sporanox





Antifungal

Fluconazole

Official Dose :**Once Weekly**

Wide Therapeutic Index 100-800 mg /Daily

Best Choice For Cryptococcal Meningitis

Used for skin & mucous fungal infection

Less affected by food but affected by PH

Side Effect Itching ,Dark Spot

Duration of Treatment : Short duration to avoid increase in liver enzyme







Antifungal

Itraconazole

Available in 4 cap used for vaginitis & 15 cap used for skin fungal infection

Therapeutic Index 100-400 mg /Day

Official Dose : **2 Cap Twice Daily Or 4 Cap One Shot …Vaginitis**

1 Cap once Or Twice daily….Skin

Best Choice For **Tinea Versicolor**

Less affected on liver enzyme







Antifungal

Allylamine

Butenafine
Derfina gel , spray
Once Daily

Terbinafine
Lamisil

Amorolifine
Leceuryl lequer

Naftifine
Exodril





Antifungal

Amorolifine

Drug of Choice For Onychomycosis

Dose :Once Weekly









Antifungal

Terbinafine

- Class B Pregnant
- Dose: Once or Twice Daily
- Side Effect: Headache & Gastric Pain
- Change The Taste Controlled By The Gum







Antifungal

Nystatin

- Local Effect Only
- Ex.Mycostat
- 1 Dropper = 100000 unit
- Dose :Below 1 year 0.5 dropper
  Above 1 year 0.75 dropper
  Adult more than 1 dropper
- Side Effect : Diarrhea







Tinea

Definition :

Lesion with or without itching with different shape

Tinea classified according to site into :

1-Tinea Capitis

2- Tinea Barbae

3-Tinea Corporis (Ring Worm)

4-Tinea Versicolor

5-Tinea Manuum

6-Onchymycosis

7-Tinea Cruris

8-Tinea Pedis

9-Atheltic Foot





Tinea

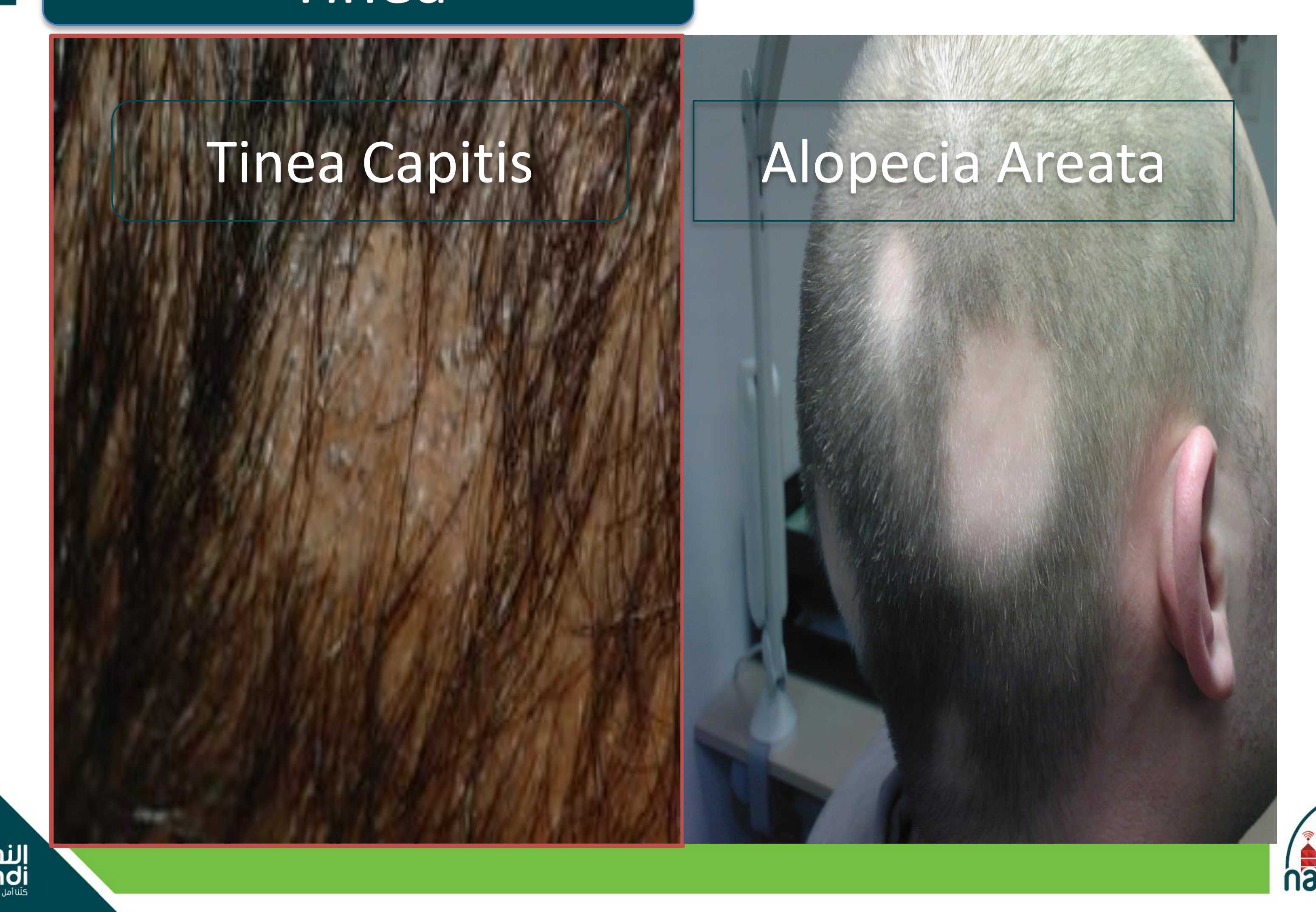
Differential Diagnosis :

	Tinea Capitis	Alopecia Areata
Broken Hair	Yes	Smooth
Scale	Yes	No
Itching	Yes	No
Spot(Redness, Brown)	Yes	No





Tinea



Tinea

Differential Diagnosis :

	Tinea Corporis	Eczema
Border	Yes	No
Faint Center	Yes	No
Complain cause	No	Yes

Take Care of Vit. A Deficiency





Tinea

Eczema

Tinea Corporis

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Tinea

Differential Diagnosis :

	Tinea Cruris	Exfoliation
Cause	No	Abnormal movement
Odour	Yes	No
Change Color Of Skin	Yes	No





Tinea

Differential Diagnosis :

	Tinea Versicolor	Vitiligo
Symptoms	Change Color Lighter Or Darker Than Normal Skin	Change in Color is Lighter Than Normal Skin Known as Meat Like Color





Tinea

Tinea Versicolor





Tinea

Differential Diagnosis :

	Onychomycosis	Psoriasis
Symptoms	Fragile Nail Opaque	Fragile Nail & Opaque & Another Patch in Other Site as Scalp





Tinea

Onychomycosis

Psoriasis





Tinea

Lines Of Treatment

1- Cleansing

- Ex.Sulphur Salicylic Soap,Ketoconazol Shampoo

2- Topical Antifungal

3- Systemic Antihistamine

4- Systemic Antifungal





Tinea


Nizoral
shampoo
against dandruff and
seborrhoeic dermatitis
100 ml
shampoo
JANSSEN-CILAG


LAMISIL
Cream
TERBINAFINE HYDROCHLORIDE 1%
FOR TREATMENT OF SKIN FUNGAL INFECTIONS
15 g


Telfast 180
fexofénadine / fexofenadine
Voie orale / Oral use
15 comprimés pelliculés
film-coated tablets
SANOFI


Pfizer
DIFLUCAN
150 mg FLUCONAZOLE
1 Capsule


النهدي
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Full of Hope كلنا أمل


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Tinea

Lines Of Treatment Of Tinea Capitis

The Same Lines Of Treatment Plus Advice The Patient Shaving The Hair

Lines Of Treatment Of Tinea Corporis

The Same Lines Of Treatment Plus Vit. A Supplement

Lines Of Treatment Of Tinea Versicolor

The Same Lines Of Treatment Except Systemic Antihistamine

If Lighter Color Than Normal Skin Expose TO Sun





Tinea

Lines Of Treatment Of Tinea Cruris

The Same Lines Of Treatment Plus Topical as Combination Of AF & Corticosteroid For Limited Time 5 Days Then Complete By Antifungal Only

Lines Of Treatment For Exfoliation :

One Topical Product as Combination Of AB & AF & Corticosteroid





Tinea

Lines Of Treatment Of Tinea Pedis

1- Separator

2-Cleansing & Dryness

3-Topical Antifungal

The Sequence Of Efficiency According To Dosage Form

Powder>Spray>Solution >Gel > Cream

Avoid Of Ointment Dosage Form

4-Antihistamine

5-Systemic Antifungal

6-IF Reach To Wound Stage used AB

7-IF Diabetic Patient Must Be Referral





Tinea

Lines Of Treatment Of Onychomycosis

The Best Choice Of Drug : Loceryl once or twice weekly

Duration Of Treatment :3-6 Months

Referral Case





Tinea

Lines Of Treatment Of Manuum (Wife Hand dermatitis) as diaper rash treatment

1- Cleansing (Soap less Soap Free From Detergent)

2- Antifungal (Combination)

3- Soothing & Enhance The Healing

Ex. Dexapanthenol (Bepanthen®), Scabio , Cicative

4- Systemic Antihistamine (Telfast®)

5- Medical Gloves (Allederm)



Tinea

Add Value For All Type Of Tinea

1-Personal Hygiene

2- Wash Cloth in Hot Water

3- Immuno-Stimulant (Echinacea)





Tinea

Add Value For Tinea Cruris
As before plus whiting for sensitive area

Add Value For Onychomycosis
As before plus nail tonic as Cysteine & B6

Add Value For Tinea Versicolor
As before plus unify color as suntan , foundation





Acne Preparation

Acne Preparation

Exfoliate

Less Exfoliate
High
Antibacterial

Antibacterial





Acne Preparation

Adapalene Less Irritant & Less Photosensitivity

Adapalene
Differin Gel®

Tretinoin
Retin-A® Gel, Cream

Azelic Acid
Skinoren®

Exfoliate

α-Hydroxy acid

Isotretinoin
Isotrexin®

Salicylic Acid

Isotretinoin Oral as Roaccutane®, Curacne®, Xeractane®





Acne Preparation

Applications Of Exfoliate

- Wrinkle
- Dark Spot
- Acne
- Seborrhea
- Renewal Of Skin
- Ingrowing Hair





Acne Preparation

Counselling :

1-Avoid Sun Exposure
2-Prefer To Used At Night
(in the morning clean the site of application & used sun block)
3- For Sensitive Skin : Choice Low Irritant Drugs & Gradually Application & Add Moisturizer
4-Avoid in Inflamed Acne (redness area) & not effective (used AB & Corticosteroid in The First Then used Exfoliate)
5-Avoid in Pregnant & Breast Feeding
N.B Azelic Acid , Hydroxy Acid Can used in Pregnant
6-Hypersenstivity Test





Acne Preparation



Benzyl Peroxide

Gel ,
Solution ,
Cream

Less Exfoliate
High Antibacterial

Benzac Ac®
2.5 , 5 , 10

The Same
Counselling Of
Exfoliate





Acne Preparation

Antibacterial

Clindamycin
Lotion (Dry),Soln.(Oil skin),Gel (Dry & OIL)
Dalacin-T®

Erythromycin
Erysol ®

Fusidic Acid
Fucidin®

Metronidazole
Rozex®





Acne Vulgaris

Def.

Common chronic skin disease involving blockage and /or inflammation of pilosebaceous units (hair follicle & sebaceous gland this lead to the acne appear as Non inflamed acne , inflamed acne Mixture of both

Acne vulgaris has multifactorial pathogenesis as

Site : affected mostly , the face , back , shoulder ,

Age : mostly puberty age

Genetics : hereditary factor has huge effect





Acne Preparation

Factor Affect On Acne & patient counseling

1-Age
2-Comodon (White & Black Head) in sever case need referral
3-Site (Face , Shoulder , Back)
4 -Avoid Types Of Food (Spicy , Chocolate)
5-Menses (During Menses)
6 -Increase Vegetable & omega 3 containing food improve s the healthy state





Acne Preparation

Management Of Non-Inflamed Acne:

1-Cleansing
2-Peeling
3-Local Antibiotic
4-Systemic Antibiotic. as Cephalosporin , Macrolide
5-Suitable Sun Screen





Acne Preparation

Management Of Inflamed Acne:Refrral

1-Cleansing (Avoid Scrub)
2-Local Antibiotic
3-Systemic Antibiotic
Ex. Cephalosporin , Macrolide
4- systemic tretinoin by physician
5-Suitable Sun Screen





Rosacea

Definition:

Acne Like Lesion With Erythema
The disease is chronic; control rather than cure is the goal of therapy

Factor Affect On Rosacea :

1-Herdatiry
2-Enviromental
3-Age (Middle Age & Older)

Site :

Nose ,Eye Lid & Check







Rosacea

Treatment Of Rosacea :

- Clindamycin
- Metronidazole
- Benzyl Peroxide







Non OTC Drugs For Acne

Include :

1-Systemic Isotretinoin
(Roaacutane , Xeractan , Curacne)



2-Anti-Androgen Drugs





Non OTC Drugs For Acne

1-Systemic Isotretinoin

- One Of Red Category
- Dispensed By Prescription Only
- Daily Maximum Dose 80-120 mg
- The Daily Dose (0.25 – 0.5 – 1)mg /Kg /Day

- **Side Effect Of Isotretinoin**

1-Dryness (Eye , Lip , Mouth ,…….)
2-Liver Enzyme Higher Than Normal
3-Intracrainal Pressure Increase (Headache)
4-Psychatric Symptoms

- **Contra-Indicated**

Pregnant & Planning For Pregnancy
Category X







Local Vaginal Preparation

Local Vaginal Preparation

1-Local Antifungal Vaginal Preparation

2-Local Antibacterial Vaginal Preparation

3-Local Antiprotozoal Vaginal Preparation

4-Local astringent & Antiseptic Vaginal Preparation

5-Local Vaginal Wash





Local Vaginal Preparation

1-Local Antifungal Vaginal Preparation

1-Miconazol (Gynodaktrin ®400,1200mg)



2-Econazol (Pevaryl®)

3-Clotrimazol (Canesten ®0.1 , 0.5 mg)

Category B in Pregnant

4-Fenticonazol(Gynolemoxin)

5-Isoconazol (Travocort ® Topical External)







Local Vaginal Preparation

2-Local Antibacterial Vaginal Preparation

- Clindamycin(Dalacin®2%Vaginal Cream)
- Treat Aerobic & Anaerobic Bacteria & Chlamydia







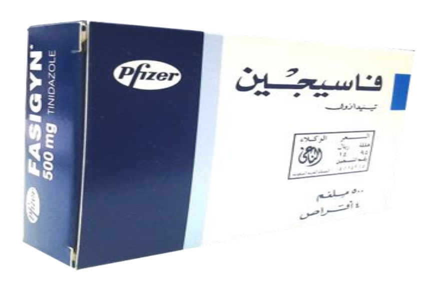
Local Vaginal Preparation

3-Local Antiprotozoal Vaginal Preparation

- Metronidazole (Amrizol Vaginal Suppository)



- Systemic Antiprotozoal :
  a-Metronidazole (Flagyl ®)
  b-Tinidazol (Fasygin)



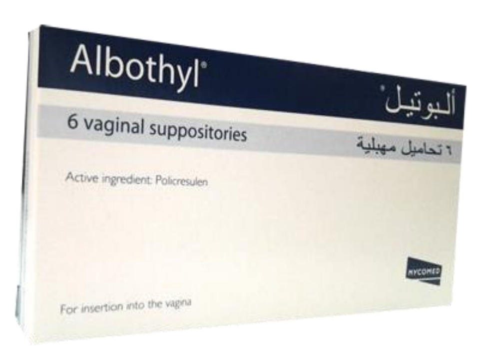




Local Vaginal Preparation

4-Local Antiseptic & astringent Vaginal Preparation

- Policresulin (Albothyl Vaginal Suppository)
- Astringent (Cervicovaginal Ulcer)
- Antiseptic
- Vaginal Tissue Return To Normal Size







Local Vaginal Preparation

5-Local Vaginal Cleansing Preparation

a. Vaginal Cleansing For Limited Use (5 Days)

- Misuse of this type cause negative effect on vaginal normal flora
- This Type has germicidal effect
- Avoid Vaginal Pump to avoid ascending infection
- Avoid during pregnant
- Example : Povidin Iodine as povei , betadine

b. Vaginal Cleansing For long Use

- No Effect on vaginal normal flora
- Example : deosept , lactacid , rosa , sebamide feminin wash , vagisil , Extra-X (Special For Pregnant)





Differential Diagnosis

Trichomonus	Bacterial	Fungal
Yellow – Green Discharge	White – Yellow Discharge	**White Cheesy Discharge**
Bad Odour	Mal Odour	Mild Odour
Mild Itching	Mild Itching	**Sever Itching**
Predicted With Sexual Intercourse	**Predicted in Post Menopausal**	Predicted in Young Ages





Different Lines Of Treatment For Vaginitis

Lines Of Treatment Of Fungal Vaginitis

1-Cleansing

- Germicidal For 5 Days
- Continuous By Other One

2-Local Antifungal

- Ex.Gynodaktrin supp. Or cream

3-Topical Corticosteroid With Antifungal

- Ex.Elica – M or daktacort

4-Systemic Antihistamine

5-Systemic Antifungal





Different Lines Of Treatment For Vaginitis

Lines Of Treatment Of Trichomonus

1-Cleansing

- Germicidal For 5 Days
- Continuous By Other One

2-Amrizol Vaginal Suppository

3-Fasygin (4 Tablet One Shot)

Lines Of Treatment Of Bacterial Vaginitis

1-Cleansing

2-Dalacin Vaginal Cream

3-Azithromycin (4 Cap One Shot)





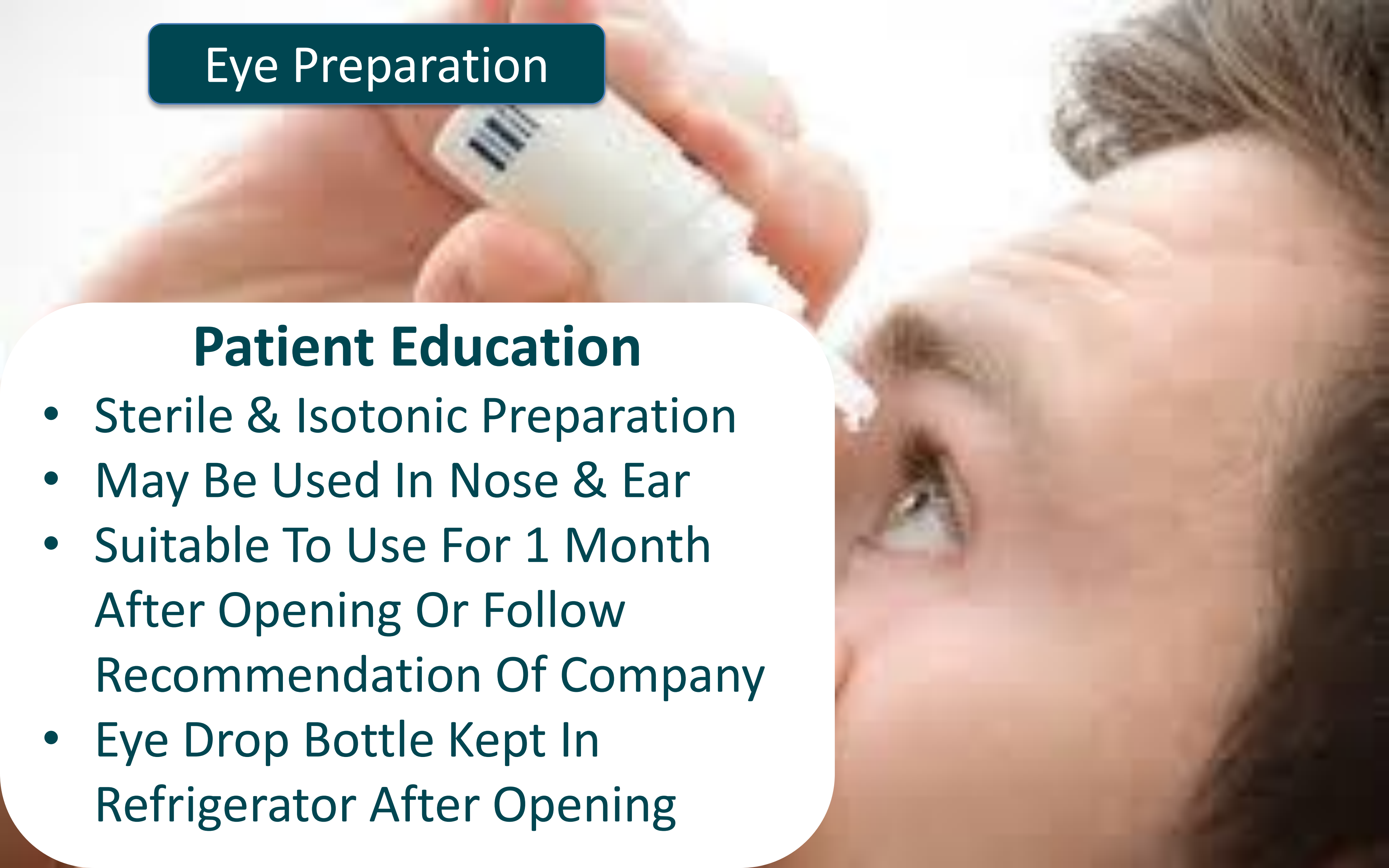
Different Lines Of Treatment For Vaginitis

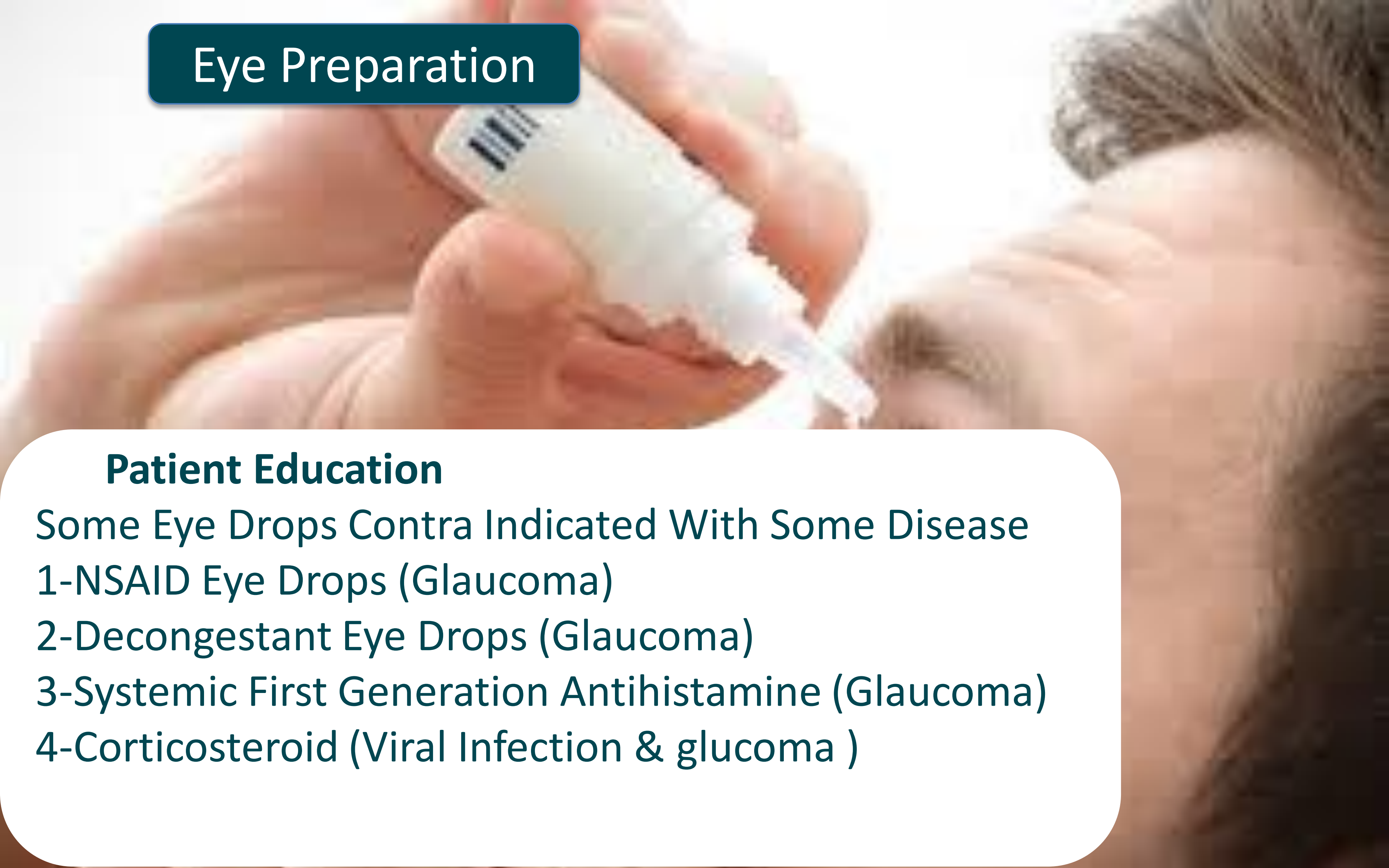
Add Value (Patient Education)

1-Cleansing for husband as leocrema wash
2-Condom for husband
3-Dose Of Drugs Mainly In Trichomonus
N.B pregnancy & chlamydial infection referral






Eye Preparation
Patient Education
• Sterile & Isotonic Preparation
• May Be Used In Nose & Ear
• Suitable To Use For 1 Month After Opening Or Follow Recommendation Of Company
• Eye Drop Bottle Kept In Refrigerator After Opening



Eye Preparation

Patient Education

Some Eye Drops Contra Indicated With Some Disease

1-NSAID Eye Drops (Glaucoma)

2-Decongestant Eye Drops (Glaucoma)

3-Systemic First Generation Antihistamine (Glaucoma)

4-Corticosteroid (Viral Infection & glucoma)



Eye Preparation

Patient Education

- Time Separate between Two Different Eye Drops 5-10 min
- Sequence Application Of Different Dosage Form Solution Then Suspension Then Ointment
- Most Cases Need Referral & deal with conjuntiva
- Guest Wear Lenses (Suitable Eye Drop –Preservative Free Eye Drop - All Single Unit Dose Preservative Drops)

Eye Preparation





Eye Preparation





Eye Preparation

Cleansing

Cataract

Moisturizer

Glaucoma

Eye Preparation

Decongestant&
Antihistamine

Anti Infective

AntiAllergic





Eye Preparation

1-Cleansing Eye Drops

- **Boric Acid**
- **Normal Saline**
- **Moisturizer**







Eye Preparation

2-Moisturizer Eye Drops

- <u>**Different Application**</u> **:**

✓ Dry Eye
✓ Cleansing
✓ With Lenses
✓ Allergic Conjunctivitis
✓ Presence Of Foreign Bodies
✓ Control Side Effect Of Some Medication
✓ After Lasik Surgery
✓ After Reading & Watching T.V







Eye Preparation

2-Moisturizer Eye Drops



- Long Acting Moisturizer as Celluvisc
- During Wear The Lenses Avoid Ointment & Other High Viscous Moisturizer except recommended from company
- Fast Action Moisturizer as Hyaluronic Acid(Hylocomod)
- Recapped Seal as Optive







Eye Preparation

3-Decongestant & Antihistamine

- Act On Smooth Muscle as Vasoconstriction & Decrease Redness
- Ex. Of Decongestant Naphazoline , Tetrazoline , phenylphrene …
- Avoid In Glaucoma & used limited time
- Antihistamine as Pheniramine ,Antazoline & Naphz











Eye Preparation

4-Antiallergic Eye Drop

a. Corticosteroid (Not OTC Drug)

- Ex. Pred Forte , FML , Optilone , Vexol (Ramixolone), Fluca
- Dexamethasone combination (Tobradex®) or mixdex
- Corticosteroid has Anti-inflammatory , Ant allergic
- Avoid In Glaucoma Patient













4-Antiallergic Eye Drop

b. Non Corticosteroid

- ✓ H1- Blocker

Ex. Levocabastine (Livostin ®) , Epinastine (Relestat®)



- ✓ H1- Blocker & Mast Cell Stabilizer

Ex. Ketotifen (Zaditen ®)

- ✓ Mast Cell Stabilizer

Ex. Sodium Cromoglycate (Croma , Apicrom)

- ✓ Control most mediator (esinophil control , Prostaglandin antagonist & mast cell stab.

Ex. Olopatadine (Olopat , Patanol , Pataday)







5-Antiinfective Eye Drop

A- Fusidic Acid (Optifucin , Fucithalmic)



B- Quinolone

C- Antiviral





Eye Preparation

5-Eye Drop For Glaucoma

Definition of Glaucoma:

Increase Intraocular Pressure Can Damage The Optic Nerve

Glaucoma Without Treatment Cause Permanent Loss Of Vision

Glaucoma Types:

1-Angle Closure Glaucoma…. Poor Drainage Of Aqueous Humor Is Caused Because The Angle Between Iris & Cornea Is Too Narrow Which Lead To Sudden Pressure In The Eye

Easily Diagnosed ..Eye Pain , Headache ,Blurred Vision , Vomiting , …..

2-Open Angle Glaucoma …. Difficult To Be Diagnosed





Eye Preparation

5-Eye Drop For Glaucoma

Who Get Glaucoma & C. I drugs with glucoma ?

- Are Over Age 40
- Have A Family History Of Glaucoma
- Have Diabetes
- C.I with glaucoma As Decongestant , NSAID , Corticosteroid ., high anticholinergic drugs , Mydriasis eye drops





Eye Preparation

5-Eye Drop For Glaucoma

Drugs Of Glaucoma:

1-B-Blocker : Such As

- Timolol .. Timpitol, Apimol , Optim
- Betaxolol .. Betoptic
- Levobunolol .. Betagan



2- α2 Agonist

- Brimonidine .. Alphagan , Brimo







Eye Preparation

5-Eye Drop For Glaucoma

Drugs Of Glaucoma:

3-Mitotic Preparation :

- Pilocarpine …Apicarpine

4-Carbonic Anhydrase Inhibitor

- Dorzolamide .. Trusopt , Xola





- Dorzolamide & Timolol .. Cosopt , Xolamol
- Brinzolamide .. Azopt
- Brinzolamide & Timolol .. Azarga





Eye Preparation

5-Eye Drop For Glaucoma

Drugs Of Glaucoma:

5-Prostaglandin Analogues

- Latanoprost .. Xalatan , Latano



- Latanoprost & Timolol .. Xalacom



- Travoprost .. Travatan
- Travoprost & Timolol .. Duotrav
- Bimatoprost .. Lumigan (Prolong Eye Lash)
- Bimatoprost & Timolol .. Ganforte







Eye Preparation

5-Eye Drop For Glaucoma

Mydriatic Eye Drop

- Atropine ..Riatropine

Cataract Eye Drop

- Catalin ®





Cases





Eye Preparation

Allergic Conjunctivitis

- Allergic
- Bacterial
- Viral





Eye Preparation

Differential Diagnosis	Allergic	Bacterial	Viral
Discharge	Little & Watery	Purulent	Plenty & Watery
Eye Pain	------	Sever & gritty	Sever & gritty
Itching	sever Itching	mild	mild
Corneal Affect By Light	++	+	++++++
Accompanied With	Seasonal & Genetic	Contamination	Viral Disease As Common Cold



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Eye Preparation

Allergic Conjunctivitis





Eye Preparation

Lines Of Treatment Of Allergic Conjunctivitis :

1-Decongestant & Antihistamine Eye Drop For limited time

2-Antiallergic Eye Drop

Long Term But Low Frequency Of Dose

Ex. Livostin , Zaditen , Apicrom

3-Emollient & Moisturizer (Prefer Preservative Free)

4- Systemic Antihistamine

5-Local NSAID

6-Support Treatment Cold Compression





Eye Preparation

Bacterial Conjunctivitis





Eye Preparation

Lines Of Treatment Of Red Infected Conjunctivitis :

Avoid Corticosteroid

1-Cleansing Ex.Normal Saline

2-Topical Antibiotic Ex.Fucithalmic

3-Decongestant With Antihistamine Or Local NSAID

4-Systemic NSAID

5-Systemic Antibiotic Ex.Azithromycin

6-Support Warm Compression (Improve Circulation)





Eye Preparation

Swollen Eye Lid



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Eye Preparation

Lines Of Treatment Of Swollen Eye Lid:

1-Local & Systemic Antibiotic

2-NSAID

After One Day If Not Improved Must Referral





Eye Preparation

<u>Lines Of Treatment Of Redness after trauma :</u>

1-Moisturizer

2-Decongestant

If Patient Suffer From Glaucoma Or Diabetic Must Be Referral

In Case Redness after trauma

Moisturizer Only & Referral





Eye Preparation

Crusty Eye Lid
Blephritis



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Eye Preparation

Lines Of Treatment Of Crusty Eye Lid :

1-Cleansing

2-Local Antibiotic

3-Systemic Antibiotic

4-NSAID





Eye Preparation

Lines Of Treatment Of Pain due to welding (عامل لحام):

1-Local Anesthesia

2-Local NSAID

3-Moisturizer

4-Systemic NSAID

Other cases as foreign body in the eye , dry eye different symptoms






Local Nasal Preparation

Local Nasal Preparation

Local Nasal Preparation

- Decongestant
- Decongestant & Antihistamine
- Sea Water Product
- Local Ant allergic & Anti-inflammatory





Local Nasal Preparation

1-Decongestant :

Act On Smooth Muscle as Vasoconstrictor Which Decrease Blocking & Swelling (Rapid & Strong Effect)

Ex.Xylometazoline….Otrivin





Ex.Oxymetazoline….Navisin





Local Nasal Preparation

Otrivin menthol : contain also menthol & sorbitol

- Menthol increase the effect
- Sorbitol decrease the dryness







Local Nasal Preparation

2-Decongestant & Antihistamine:

- Dimethindene & Phenylephrine … Vibrocil ®









Local Nasal Preparation

- Advantage : Prefer In Acute State , Strong Effect
- Disadvantage :
- Rebound Effect By Misuse (Continuous Application)Which Lead To Rhinitis Medicamentosa (Stop Use & Use Local Moisturizer)
- Ex.Drossa-Nose , Glistin

Decongestant nasal preparation C.I in the following :

1-Hypertension

2-Pregnant

3-Baby Less Than 1 Year





Local Nasal Preparation

3-Sea Water :

- Prefer In Hypertensive patient , Baby , Pregnant
- Used As Nasal Irrigation as (Alkaline Nasal Irrigation , Normal Saline)
- Ex.Ocean , Physiotherm , Sinoclear
- Specific For Child & Adult
- Isotonic Or Hypertonic











Local Nasal Preparation

4-Antiallergic :

Divided Into :

A-Corticosteroid

B-Non-Corticosteroid

A-Corticosteroid Nasal Preparation :

- Potent Local , Less Systemic Effect
- Has Anti-inflammatory Effect Beside Ant allergic Effect
- In Case Infected Rhinitis used Corticosteroid Nasal Preparation With Antibiotic not used alone





Local Nasal Preparation

4-Antiallergic :

Divided Into :

A-Corticosteroid

B-Non-Corticosteroid

A-Corticosteroid Nasal Preparation :

- Potent Local , Less Systemic Effect
- Has Anti-inflammatory Effect Beside Antiallergic Effect
- In Case Infected Rhinitis used Corticosteroid Nasal Preparation With Antibiotic





Local Nasal Preparation

4-Antiallergic :

A-Corticosteroid Nasal Preparation :

- Fluticasone Propionate ….Flixonase (Long Duration)
- Fluticasone Furoate …. Avamys (Rapid Onset)
- Budesonide ….Rhinocort Aqua (Pregnant Class B)
- Mometasone …. (Nasonex , Tasonex , …)
- Beclomethasone …. (Rhinoclinil) (More Systemic Effect)

Disadvantage :

1-Dryness Mucosa

2-Some Bleeding Spot In The First Only

3-Change In Smell







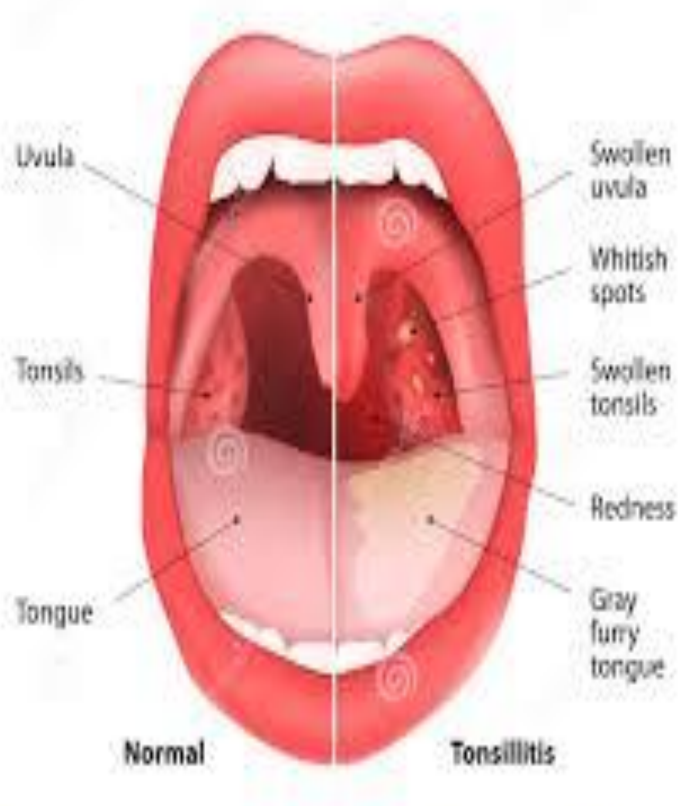


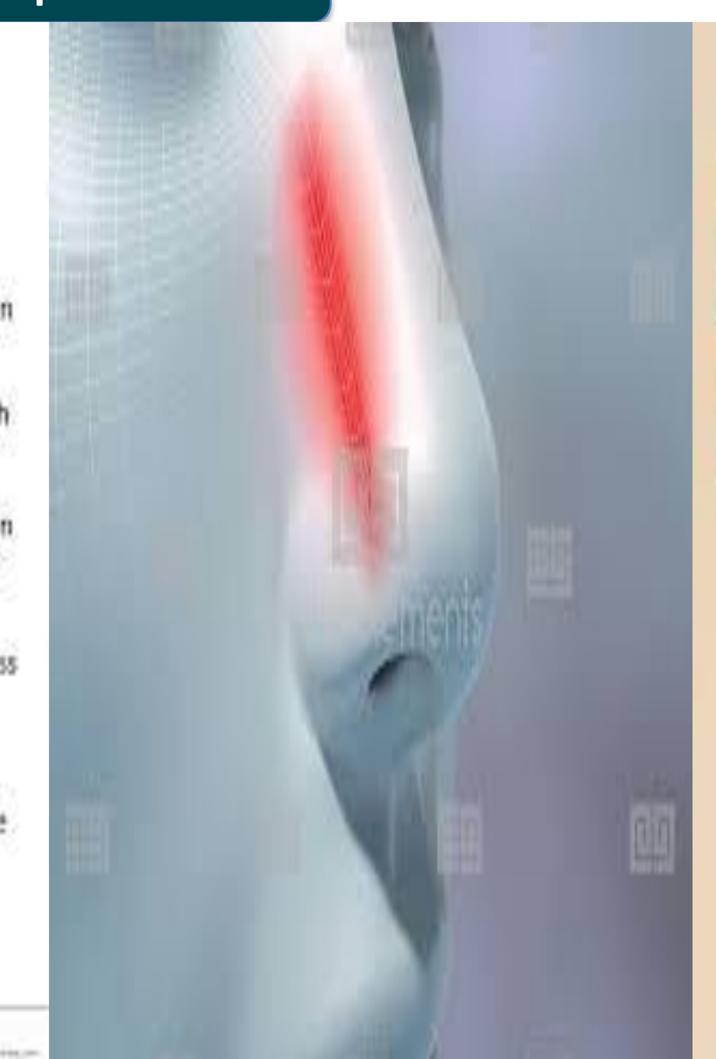
Cases



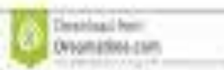


Local Nasal Preparation











Local Nasal Preparation

<u>Case 1</u>

Patient Suffer From Rhinorrhea(Prenasal Discharge) , Sneezing , Nasal Itching , Only In Nasal Cavity (Pain& Irritation)





Local Nasal Preparation

Case 1

- Diagnosis : Rhinitis
- Differential Diagnosis Between **Allergic Rhinitis** & **Infected Rhinitis**

	Infected	**Allergic**
Discharge	**Purulent**	**Watery**
Color	**Change**	**Clear**
Odor	**Change**	**------**
Cause	**Organism**	**Dust ,…**
Itching	------	**Sever**
Fever	**Sever**	**……..**





Local Nasal Preparation

Case 1

- Lines Of Treatment Of Allergic Rhinitis

1-Systemic Decongestant With Antihistamine
Ex.Clarinase , Cirrus
For Limited Time & Continuous By Antihistamine Only
2-Local Decongestant
3-Local Ant allergic
4-Systemic Anti allergic as Antihistamine , Mast Cell Stabilizer
Ant leukotriene , Corticosteroid
5-Remove The Cause





Local Nasal Preparation

Case2

- Lines Of Treatment Of Infected Rhinitis (usual has pain)

1-Antibiotic

2-NSAID

3-Avoid Ant allergic Weather Local & Systemic

4-Local Decongestant & Antihistamine

5-Systemic Decongestant & Antihistamine





Local Nasal Preparation

Case3

- Patient Suffer From :
- Continuous Headache & Heavy Head
- Dizziness
- Facial Pain
- Nasal Discharge (Post Nasal Discharge)
- Loss Of Smell
- Sever Block
- Sever Snoring





Local Nasal Preparation

Case3

- Diagnosis : Sinusitis
- May Be Allergic Or Infected
- 3 Main Lines of Treatment Of Sinusitis

1-Mucolytic
2-Irrigation
3-NSAID





Local Nasal Preparation

Case3

- Knowledge About Sinusitis

1-Sinusitis is an inflammation of paranasal sinuses
2-Sinuses Are Filled With fluid instead of air But When Sinuses Become Blocked By Fluid .... Lead to (Heavy head)





Local Nasal Preparation

Case3

- Other Lines Of Treatment For Sinusitis

1-Systemic Decongestant & Antihistamine
2-Local Decongestant
3-Local Ant allergic
4-Systemic Anti allergic





Local Nasal Preparation

Patient Education :

- Nasal Cavity Should Be Clean & Open By Nasal Irrigation
- Drink Plenty Of Fluid
- Immuno-Stimulant
- Decongestant & Chewing Gum

(خاصه في المناطق المرتفعه مثل الطيران)

- Snoring Strip
- Inhaled Vicks
- Mask (Protect Against Dust)





Local Nasal Preparation

Case 4 :

- Patient Suffer From :

1-Sneezing
2-Stuffy Nose
3-Watery Eye
4-Mucous Drainage Into Throat
5-Hacking & Productive Cough
6-Pain In Pharyngeal cavity (throat)





Local Nasal Preparation

Case 4 :

- Diagnosis : Common Cold
- **Lines Of Treatment Of Common Cold**

1-Local Decongestant
2-Systemic Decongestant & Antihistamine
3-Local Antiseptic & Soothing
4-Suitable Cough Syrup
5-NSAID
6-Volatil Oil Vapor
7-Systemic Antibiotic (To Control Secondary Infection)

- **Add Value**

1-Vit.C   2- Plenty Fluid





Local Nasal Preparation

Case 5 :

- Patient Suffer From :

1-Sneezing
2-Runny Nose
3-Headache
4-Cough
5-Fatigue
6-Fever (Not Exceed 38.5)
7-Sore Throat





Local Nasal Preparation

Case 5 :

- Diagnosis : Pharyngitis
- Pharyngitis Is Viral Infection
- Lines Of Treatment Of Pharyngitis:

1-Avoid Start With Antibiotic Mainly Viral Infection
2-Mouth Wash (Gargle)
3-Local Antiseptic & Soothing
4-Systemic Anti inflammation Drug
5-If Irritation Or Mucous ..Mucolytic
In Case Not Treated Within From 2-3 Days
6-Systemic Antibiotic
If Change In Voice (Laryngitis)
The Same Lines & Add Vapor





Local Nasal Preparation

Case 6:

- Patient Suffer From :

1-Throat Pain
2-Redness Of Tonsil
3-Difficulty Of Swallowing
4-Sever Fever & Repeat
5-Enlarge Lymph Node





Local Nasal Preparation

Case 6:

- Diagnosis : Tonsillitis
- Lines Of Treatment Of Tonsillitis

1-Systemic Antibiotic

By Maximum Dose & Complete Course

2-Mouth Wash (Gargle)

3-NSAID

- Tonsillectomy :

1-Repeated More Than 5 Times Per Year

2-Pain In Joint

3-Follicular i.e. (With Pus)

4-Age Above 4 Years





Local Nasal Preparation

Case 7:

- Patient Suffer From :

1-Cough
2-Production Of Mucous Which Can Clear , White Or Green In Color , With Or Without Of Blood
3-Slight Fever & Chills
4-Fatigue





Local Nasal Preparation

Case 7 :

- Diagnosis : **Bronchitis**
- **When To Referral :**

1-Last More Than 3 Weeks
2-Prevent From Sleeping
3-Fever Higher Than 38 c°
4-Produce Blood
5-Produce Discolor Mucous

- **Lines Of Treatment :**

1-Systemic Antibiotic
2-Suitable Cough Syrup
3-Bronchodilator (Relief The Breath , Help Cilia To Removal Mucous
4-Antihistamine

Miscellaneous Topical Products

Rozex:

- Active Ingredient : Metronidazole
- Indication: Rosacea , Acne



Daivonex :

- Active Ingredient : Calcipotriol (Derivative Of Vit.D)
- Indication: Psoriasis (Regulate Cell Proliferation)
- Dose : Thin Layer Twice Daily



Daivobet :

- Active Ingredient : Calcipotriol With Betamethasone
- Best Dosage Form For Hairy Area Is Gel





Miscellaneous Topical Products

Aldara Sachet :

- Active Ingredient : Imiquimod
- Indication: All Types Of Warts(Viral , Genital External Wart)
- Dose : Once Daily (Do Not Wash Before 8 Hours From Application)
- Day Per Day Or Daily & Rest 2 days
- Duration Of Treatment :4-16 Weeks
- Side Effect : Burn
- Patient Education : Do Not Touch Mucous







Miscellaneous Topical Products

Wartec:

- Active Ingredient : Podophyllotoxin
- Indication: External Genital Wart
- Dose : Twice Daily For 3 Days & Repeated After 7 Days







Miscellaneous Topical Products

Nasodren:

- Active Ingredient : 100% natural product, based on Cyclamen Europaeum extract.
- Indication: Sinusitis Symptoms (Liquefy Of Mucous Locally)
- Dose : Once Daily







Camuvir:

- Active Ingredient : Iota Carrageenan, Limonum Extract
- Indication: Antiviral
- Dose : 3-4 Times Daily







Miscellaneous Topical Products

Allerbar:

- Indication: Allergic Rhinitis
- Mechanical Protection Of Nasal Mucous By Prevent Contact With Pollen ,Dust ,….
- Dose : 3-4 Times Daily





Thank You

Prepared By : Medhat

